Application No.: 10/783,552 Docket No.: MWS-111

AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph beginning at page 6, line 1 with the following paragraph.

The central processing unit 202 is any logic circuitry that responds to and processes instructions fetched from the main memory unit 204. In many embodiments, the central processing unit is provided by a microprocessor unit, such as: the 8088 processor, the 80286 processor, the 80386 processor, the 80486 processor, the Pentium PENTIUM processor, Pentium ProPENTIUM PRO processor, the Pentium PENTIUM II processor, the Coleron CELERON processor, or the XeonXEON processor, all of which are manufactured by Intel Corporation of Mountain View, California; the 68000 processor, the 68010 processor, the 68020 processor, the 68030 processor, the 68040 processor, the PowerPCPOWERPC 601 processor, the PowerPCPOWERPC 604 processor, the PowerPCPOWERPC 604e processor, the MPC603e processor, the MPC603ei processor, the MPC603ev processor, the MPC603r processor, the MPC603p processor, the MPC500 processor, the MPC740 processor, the MPC745 processor, the MPC750 processor, the MPC755 processor, the MPC 5500 processor, the MPC7400 processor, the MPC7410 processor, the MPC7441 processor, the MPC7445 processor, the MPC7447 processor, the MPC7450 processor, the MPC7451 processor, the MPC7455 processor, the MPC7457 processor, all of which are manufactured by Motorola Corporation of Schaumburg, Illinois; the Crusoe CRUSOE TM5800 processor, the Crusoe CRUSOE TM5600 processor, the Crusoe CRUSOE TM5500 processor, the Crusoe CRUSOE TM5400 processor, the Efficient EFFICEON TM8600 processor, the Efficient EFFICEON TM8300 processor, or the Efficeen EFFICEON TM8620 processor, manufactured by Transmeta Corporation of Santa Clara, California; the RS/6000 processor, the RS64 processor, the RS 64 II processor, the P2SC processor, the POWER3 processor, the RS64 III processor, the POWER3-II processor, the RS 64 IV processor, the POWER4 processor, the POWER4+ processor, the POWER5 processor, or the POWER6 processor, all of which are manufactured by International Business Machines of White Plains, New York; or the AMD Opteron OPTERON processor, the AMD Athalen ATHALON 64 FX processor, the AMD Athalen ATHALON processor, or the AMD Duron DURON processor, manufactured by Advanced Micro Devices of Sunnyvale, California.

Application No.: 10/783,552 Docket No.: MWS-111

Please replace the paragraph beginning at page 20, line 1 with the following paragraph.

In some embodiments, the modeling environment 110 includes a knowledge base 350 that aids construction of a model. In some of these embodiments, the knowledge base 350 contains models for various reactions, e.g. glycolysis. In these embodiments, when a user begins to input reactions consistent with a model for glycolysis, the knowledge base 350 may enter the remaining reactions for the user. Alternatively, the knowledge base 350 may offer different models of the reaction to the user. In some of these embodiments, the offered models represent the target reaction with varying levels of detail. In other embodiments, the knowledge base 350 may insert parameters or indications of reversibility for entered reactions. The knowledge base 350 may also provide assistance to a user inputting a block diagram representation of a chemical or biochemical reaction. For example, the knowledge base 350 may prevent a user manufactured by connecting blocks inconsistent with the modeled reaction. Examples of publicly-available databases that may be used to facilitate generation of models include the Swissprot database (http://us.expasy.org/sprot), National Center for Biotechnology Information (NCBI) database (http://www.nebi.nlm.nih.gov), the Protein Data Bank (http://www.rosb.org/pdb), and Kyoto Encyclopedia of Genes and Genomes (KEGG) (http://www.genome.ad.jp/kegg/kegg2.html). Alternatively, the user may provide private databases to act as a knowledge base 350 for facilitating creation of models.